Solid Power

A Leading Developer of All Solid-State Batteries (ASSB) for Transportation Markets

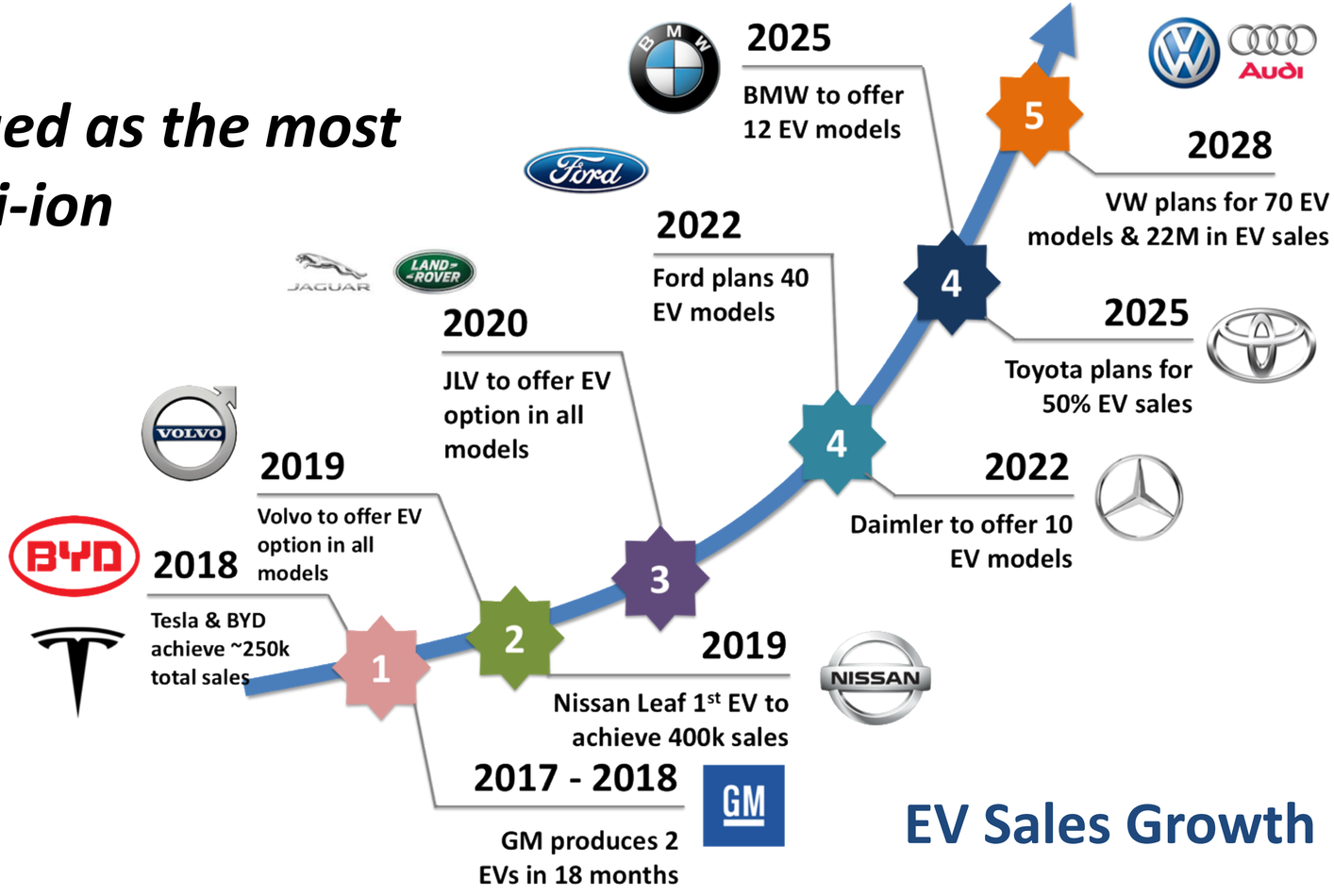
July, 2019

Doug Campbell, CEO

OPPORTUNITY

- Vehicle electrification will transform future transportation markets – ***battery performance, cost & safety represent the greatest risk to this opportunity***
- Recognition that Li-ion is nearing its performance limits with ongoing safety concerns
- ***All solid-state batteries have emerged as the most probable candidate for displacing Li-ion***

Competitive Landscape

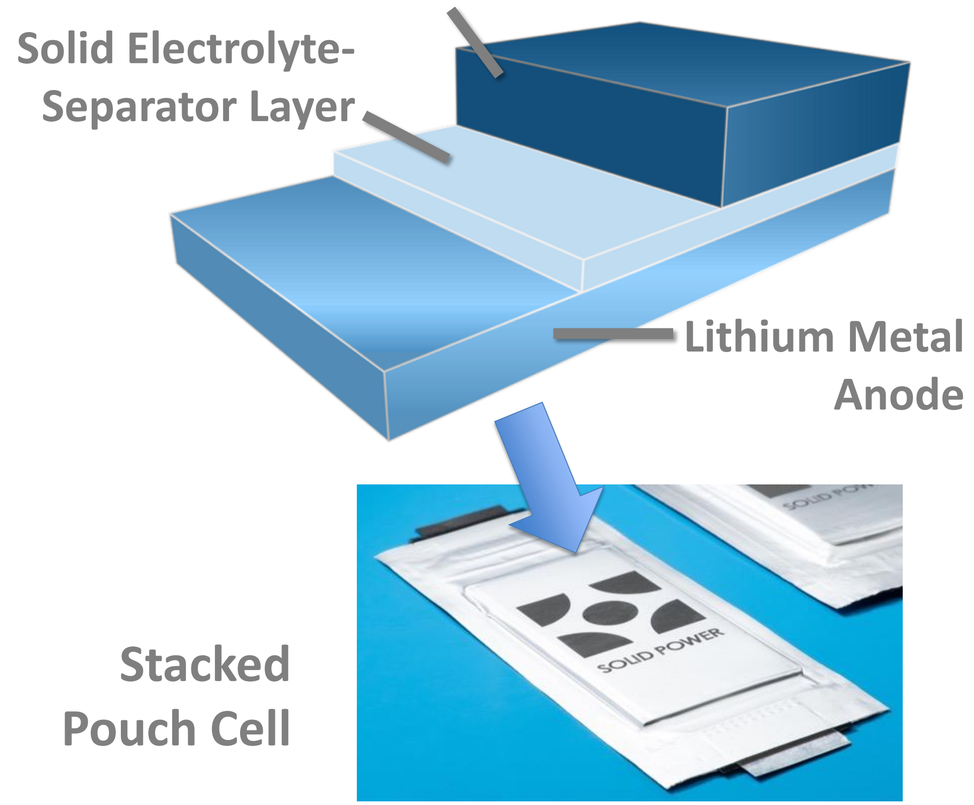


Solid Power & ASSP Technology

- Established in 2012 as a spin-out from Univ. of Colorado Boulder
- Extensive IP (in-house & licenses) spanning material compositions, cell design and processing/manufacturing
- **Solid Power has established itself as a leader in sulfide all solid-state batteries (ASSB):**
  1. High energy
     - Higher capacity cells via Li-metal anodes & simpler pack designs
  2. High Safety
     - Lower pack-level costs via minimization of safety features and elimination of pack cooling

Solid Power is currently undergoing production scale-up via its MWh-scale "pre-pilot" line

Solid Power's ASSB Schematic



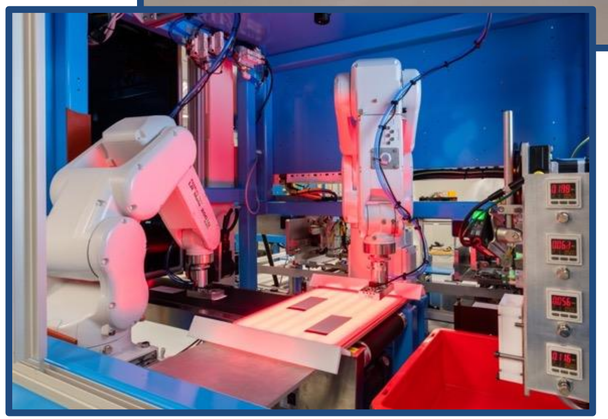
PROPOSED "ENHANCED" PRE-PILOT

- Solid Power has installed a MWh-scale "pre-pilot" production line

An "Enhanced" Pre-Pilot is envisioned:

- Increase capacity from 1MWh to 10MWh
- Standardize production processes (i.e., QMS) enabling transition to true pilot production
- ~$10M is required
  - ~$2M Cap-Ex
  - ~$8M Op-ex

Position for Series A Cell Production by 2021



TEAM

Personnel:

- CEO, Doug Campbell: start-up veteran in the energy storage, aero & defense industries
- President, Dave Jansen: veteran in small business, operations and investment
- CTO, Josh Garrett: Internationally-renowned expert in solid-state batteries

Future Plans Based on Envisioned Public-Private Partnership:

- 2019: Implement current pre-pilot line
- 2020: Initiate auto qual trials & expand facility to support MWh-scale
- 2021: Transition to Series A Cell production *(proposal herein accelerates this by 12-24 months)*

Funding To-Date	
2013-2017	$10M Public (State & Fed)
	$3M Commercial
2017-2020	$26M Private
	$4M Commercial
Proposed $10M will augment the above culminating in transition to Series A Cell Production by 2021	

Current Partners

Auto OEMs

Financial & Strategics